MAPLEWOOD NATURE CENTER 2nd -3rd Grades CURRICULUM 2015-16

SECOND GRADE – (2 Hour Programs)

THE Great Tree Search (Fall and Spring)

Search the woods with a naturalist for many plant forms according to season including oak seedlings and mature trees. Examine many kinds of wild fruits and plant seeds. Compare the characteristics of tall trees with small trees and tree seedlings. Compare leaf color and shape and wood grain and color from a variety of trees. Use magnifiers to count the growth rings from a very old oak tree.

- 2.4.1.1.1 Describe and sort plants into groups in many ways, according to their physical characteristics.
- 2.4.2.1.1 Recognize that plants need space, water, nutrients and air, and that they fulfill these needs in different ways.
- 2.4.3.1.1 Describe the characteristics of plants at different stages of their life cycles.

New – MAPLE SYRUPING- Yesterday and Today (available March 23-31st)

Learn about the process of making maple syrup using traditional and modern methods. Examine the raw materials and replicas of objects used by the Anishinaabe. Taste native foods and learn about the home life of the Anishinaabe 200 years ago. Students measure air temperature and learn how weather conditions affect maple sap production.

- 2.2.3.5.1 Classify materials that come from nature as natural resources.
- 2.4.2.4.1 Compare and contrast daily life for Minnesota Dakota or Anishinaabe peoples in different times, including before European contact and today.
- 2.4.2.4.2 Describe how the culture of a community reflects the history, daily life or beliefs of its people.

THIRD GRADE - (2 Hour Programs)

Energy Adventures (All Seasons)

Explore, investigate and discover the scientific properties of light energy with indoor and outdoor hands-on activities. Find out how solar panels absorb light and transform it into electrical energy. Make your own UV light detector to take home. Ride the energy bike, do an energy bingo hike, and learn ways to conserve energy!

- 3.2.3.1.3 Light travels in a straight line until it is absorbed, redirected, reflected or allowed to pass through an object.
- 3.1.3.4.1 Use tools, including rulers, thermometers, magnifiers and simple balance, to improve observations.
- 3.2.3.1.3 Describe how light travels in a straight line until it is absorbed, redirected, reflected or allowed to pass through an object.

New -Investigating Mammal Strategies (Winter)

Students conduct experiments to compare how the relative body size of the Eastern Chipmunk and the Short-tailed Shrew might explain their differing strategies for surviving the winter. They sort winter active animals into groups according to their track patterns in snow and search for signs of mammals and birds outdoors.

SNOWSHOEING OPTION: If snow conditions are good, we can substitute snowshoeing for some activities.

- 3.1.1.2.4 Construct reasonable explanations based on evidence collected from observations or experiments.
- 3.1.3.4.1 Use tools, including rulers, thermometers, magnifiers and simple balance, to improve observations.
- 3.4.1.1.2 Groups of Plants & Animals

Identify common groups of plants and animals using observable physical characteristics, structures and behaviors.

New – Wetland Birds and Bugs (Spring)

Use nets to capture pond bugs and examine them closely to identify their structures. Compare the physical characteristics and behaviors that distinguish bird groups and enable them to survive, breed and raise their young. Understand how light travels through the lenses of binocular as you use them to magnify and observe birds from afar.

- 3.1.3.4.1 Use tools, including rulers, thermometers, magnifiers and simple balance, to improve observations
- 3.4.1.1.2 Identify common groups of plants and animals using observable physical characteristics, structures and behaviors.
- 3.2.3.1.3 Describe how light travels in a straight line until it is absorbed, redirected, reflected or allowed to pass through an object.